

LISTING OF CLAIMS

No amendments to the claims are submitted with this paper. The following listing of claims is presented solely for the Examiner's convenience:

1. (Previously Presented) A surgical needle, which comprises:

an elongated substantially linear needle body defining a central longitudinal y-axis along which the needle body extends and transverse x and z-axes, the needle body including a central shaft portion, a first suture end portion for attachment to a suture and a second needled end portion for penetrating tissue, the needled end portion having three sides which intersect to define three cutting edges and terminate at a needle point, each side including one sole pair of planar surface portions arranged in oblique relation to define a general concave appearance to each side, the needled end portion further defining an enlarged transition portion adjacent the central shaft section, the enlarged transition portion defines a z-dimension "z_t" and an x-dimension "x_t", "x_t" being greater than a corresponding x-dimension "x₁" of the central shaft, wherein the z-dimension "z_t" is defined as being transversely perpendicular to the central longitudinal y-axis and extending between a first cutting edge and a second cutting edge, and wherein the x-dimension "x_t" is defined as being offset 90° from the z-dimension "z_t" and extending between a third cutting edge and a surface portion between the first cutting edge and the second cutting edge;

the needle point being displaced a predetermined distance with respect to the longitudinal axis and wherein the predetermined distance is less than ½ the x-dimension "x_t" of the enlarged transition portion; and

at least one side of the needled end portion being displaced in the x-dimension “ x_t ” by an angle α from a plane parallel to the longitudinal axis, the angle α being between about 2° and 10°, wherein the side of the needled end portion displaced by angle α from the plane parallel to the longitudinal axis has a substantially continuous slope between the enlarged transition portion and the needle point.

2. (Previously presented) The surgical needle according to claim 1 wherein the planar surface portions of each side are arranged to intersect along a median plane bisecting a respective side to define a substantially symmetrical concave appearance to the respective side.

3. (Previously presented) The surgical needle according to claim 1 wherein the enlarged transition portion defines a z-dimension “ z_t ” greater than a corresponding z-dimension “ z_l ” of the central shaft portion.

4. (Previously presented) The surgical needle according to claim 3 wherein the x-dimension “ x_t ” and the z-dimension “ z_t ” correspond to the height and width respectively of the transition portion of the needled end portion.

5. (Previously presented) The surgical needle according to claim 1 wherein the planar surface portions of each side intersect to define an included angle ranging from about 160° to about 175°.

6. (Previously presented) The surgical needle according to claim 5 wherein the included angle is about 170°.

7. (Previously presented) The surgical needle according to claim 1 wherein two of the cutting edges intersect at the needle point and define an angle of about 22° to about 25°.

8. (Previously presented) The surgical needle according to claim 1 wherein the central shaft portion defines a distal shaft transition portion adjacent the needled end portion, the distal shaft portion defining a cross-section of general triangular character.

9. (Previously presented) The surgical needle according to claim 8 wherein the distal shaft portion includes three planar surfaces interconnected by rounded surfaces.

10-11. (Canceled)

12. (Previously Presented) A surgical needle, which comprises:
an elongated needle body defining a central longitudinal y-axis along which the needle body extends and transverse x and z-axes, the needle body including a central shaft portion, a first suture end portion for attachment to a suture and a second needled end portion for penetrating tissue, the needled end portion having three sides which intersect to define three cutting edges and terminating at a needle point, each side including a pair of planar surface portions arranged in oblique relation and intersecting along a median plane bisecting a respective side to define a general concave appearance to the respective side, the

needled end portion further defining an enlarged transition portion adjacent the central shaft section;

wherein the enlarged transition portion defines a z-dimension "z_t" and an x-dimension "x_t", "x_t" being greater than a corresponding x-dimension "x₁" of the central shaft, wherein the z-dimension "z_t" is defined as being transversely perpendicular to the central longitudinal y-axis and extending between a first cutting edge and a second cutting edge, and wherein the x-dimension "x_t" is defined as being offset 90° from the z-dimension "z_t" and extending between a third cutting edge and a surface portion between the first cutting edge and the second cutting edge;

the needle point being displaced a predetermined distance with respect to the longitudinal axis and wherein the predetermined distance is less than ½ the x-dimension "x_t" of the enlarged transition portion; and

at least one side of the needled end portion being displaced in the x-dimension "x_t" by an angle α from a plane parallel to the longitudinal axis, the angle α being between about 2° and 10°, wherein the side of the needled end portion displaced by angle α from the plane parallel to the longitudinal axis has a substantially continuous slope between the enlarged transition portion and the needle point.

13. (Canceled)

14. (Previously Presented) The surgical needle according to claim 12 wherein the enlarged transition portion “ z_t ” at least substantially equal to a corresponding z-dimension “ z_l ” of the central shaft.

15. (Previously presented) The surgical needle according to claim 14 wherein the enlarged transition portion “ z_t ” is greater than the corresponding z-dimension “ z_l ” of the central shaft portion.

16 -19. (Canceled)

20. (Previously presented) The surgical needle according to claim 15 wherein each side of the needled end portion includes a single pair of first and second planar surface portions arranged in oblique relation, the first and second planar portions being the pair of planar portions.

21. (Previously presented) The surgical needle according to claim 12 wherein each side of the needled end portion includes a single pair of first and second planar surface portions arranged in oblique relation, the first and second planar portions being the pair of planar portions.

22. (Previously presented) The surgical needle according to claim 1 wherein each cutting edge is substantially linear.

23. (Canceled)

24. (Previously presented) The surgical needle according to claim 1 wherein the needle body is adapted to assume a curved configuration.

25. (Previously presented) The surgical needle according to claim 12 wherein each cutting edge is substantially linear.

26. (Canceled)